



**Project Name:** PennDOT D6 E03413 Low-Cost Safety Improvements  
**Owner/Client:** PennDOT District 6  
**Type of Project:** Traffic Engineering / Signal Design  
**Location:** Bucks, Delaware, Philadelphia Counties  
**Completion Date:** 2019  
**Contract Value:** \$425,800

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## Project Description

PennDOT District 6-0 pursues innovative low-cost safety approaches to improve high crash locations and corridors within the district. PennDOT has initiated low cost safety improvements in the past five years to reduce the number of fatalities on Pennsylvania roadways. Types of low-cost safety countermeasures include, improved signage, pavement markings, traffic signal design and pedestrian signal installation.

## KMJ's Approach

**Levick Street and Ridge Avenue-** Levick Street from Farnsworth Street to Tulip Street, is a 1.3-mile one-way roadway with heavy pedestrian travel. **KMJ was responsible for preparing traffic signal plans for ten (10) intersections as well as an interconnect plan.** This involved verifying existing conditions, developing traffic signal permit plans and a fiber interconnect plan in accordance with both City of Philadelphia and PennDOT standards. KMJ actively participated in the design field view and coordinated with the City of Philadelphia utilities manager. KMJ also prepared an interconnect plan for Ridge Avenue between Spring Garden Street and Jefferson Street in the City of Philadelphia.



**New Falls Road - KMJ was responsible for preparing traffic signal plans and a system plan for five signalized intersections along New Falls Road in Bucks County.** This involved data collection, verifying existing conditions, calculating clearance timings and conflict factors, and preparing the plan set and tabulations. In addition, KMJ conducted capacity analysis using Synchro to determine new signal timings and offsets.

**Intersection Safety Implementation Plan (ISIP) and Roadway Departure Implementation Plan (RDIP) - KMJ prepared construction plans for both signalized and unsignalized intersections, signal permit plans and signal system plans in all five District 6 counties.** KMJ conducted data collection, Synchro analysis, and traffic signal warrant analysis as part of various assignments. **KMJ prepared a pavement marking and signing plan for the 11-mile PA Route 52 corridor in Chester County.**

## Client Contact/Reference

Ashwin Patel, PE  
PennDOT District 6  
7000 Geerdes Boulevard  
King of Prussia, PA 19406  
610-205-6567  
[ashpatel@pa.gov](mailto:ashpatel@pa.gov)

George C. Gumas, PE  
HNTB Corporation  
680 American Avenue, Suite 180  
King of Prussia, PA 19406  
610-290-5110  
[ggumas@hntb.com](mailto:ggumas@hntb.com)